NICOR®

Warehouse Lighting

High/Low Bay & Site Completion Guide

Introduction

Industrial LED Lighting Solutions

NICOR delivers industry leading performance and reliability in high bays, warehouses, and industrial lighting. This complete family of products includes state-of-the-art high bays that are enhanced by control systems that meet and exceed local and national codes. Industrial and commercial properties include an extensive variety of spaces including warehouses with racking, office space, restrooms, parking lots, and paths of egress. NICOR has the solutions for all your needs.

Total Cost of Ownership

Ongoing Benefits

- Increase profits by reducing picking and scanning errors
- Increase productivity with fewer maintenance shutdowns
- Support a safe and productive work environment

Calculating Cost

Total cost of ownership is a financial estimate that helps owners and managers determine the direct and indirect costs of a lighting system. Going beyond energy consumptions and wattage comparisons, calculations should include all the less apparent costs related to the installation and should consider the full cost of an asset over its useful life. This includes ongoing maintenance, effects on cooling systems, sensors and code requirements, and lumen maintenance calculations. When the full cost is examined, it makes it easy to see how high-efficient LEDs reduce energy costs and increase the lifetime of the luminaires.

Cost of Lighting

Initial Cost
30%

The Hidden Costs

Ongoing Cost
70%

Cost Breakdown

Save 24 Hours a Day

Warehouses and distribution centers are more active than ever. Open during the day and more frequently into the night, saving energy plays a key role in selecting a lighting package. Combining high efficiency LED luminaires with control systems that include daylight harvesting and fully dimmable solutions provide up to 65% energy savings compared to legacy technology. More light with fewer fixtures; use up to 75% less energy – saving money and the environment.

NICOR®

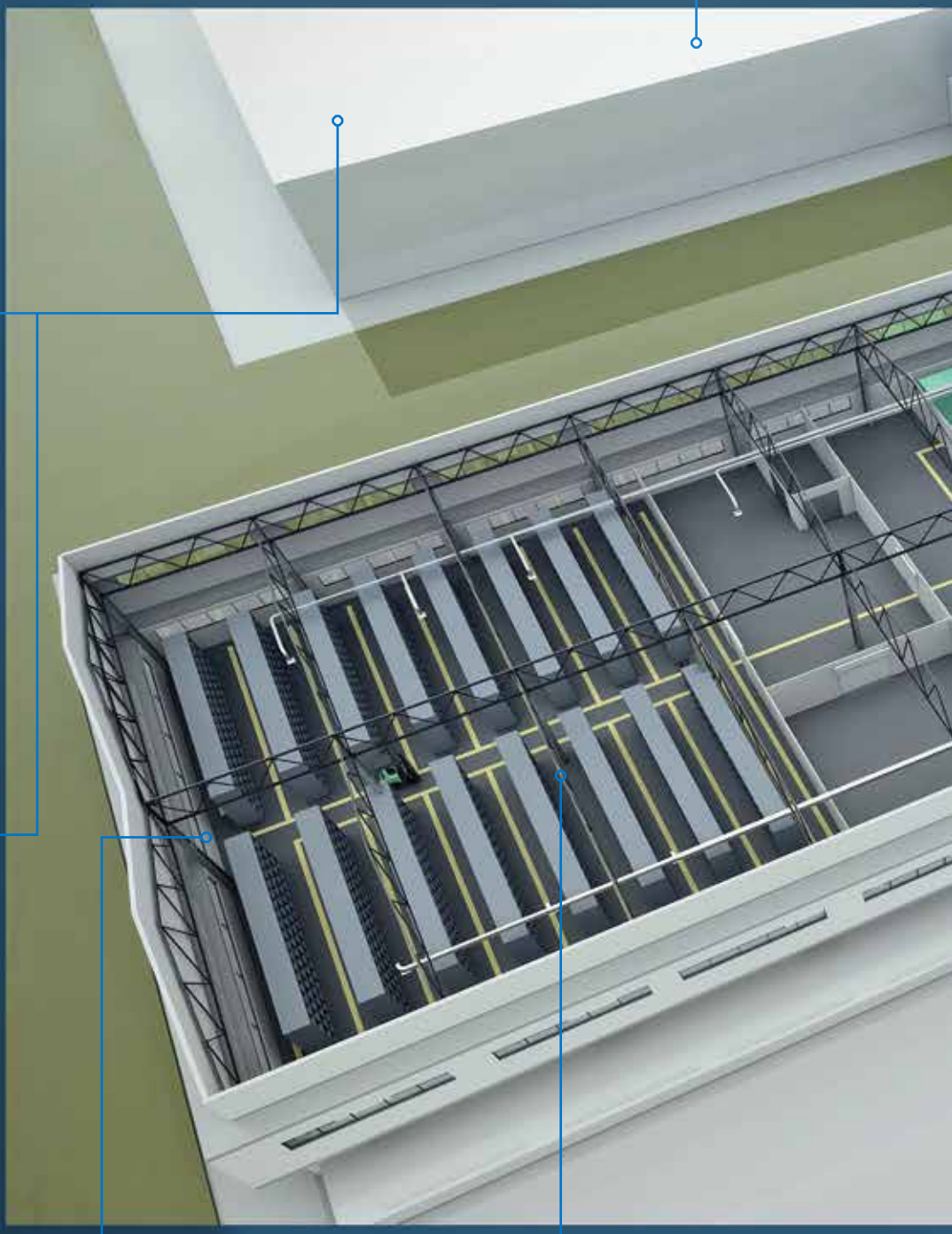
Warehouse Overview

Architectural Interiors

For a clean, professional office aesthetic, our architectural linear fixtures provide the perfect lighting solution.

Troffers

Office lighting is key to productivity. Our troffers provide economical illumination for interior spaces.



Commercial Downlights

See our full line of downlights to complete any office, warehouse, and even exterior patio locations. The Paragon line offers 1200 to 9000 lumens, for any ceiling height.

Emergency

Meet egress requirements and provide safety for employees with our wide variety of emergency lighting fixtures.

High Bays

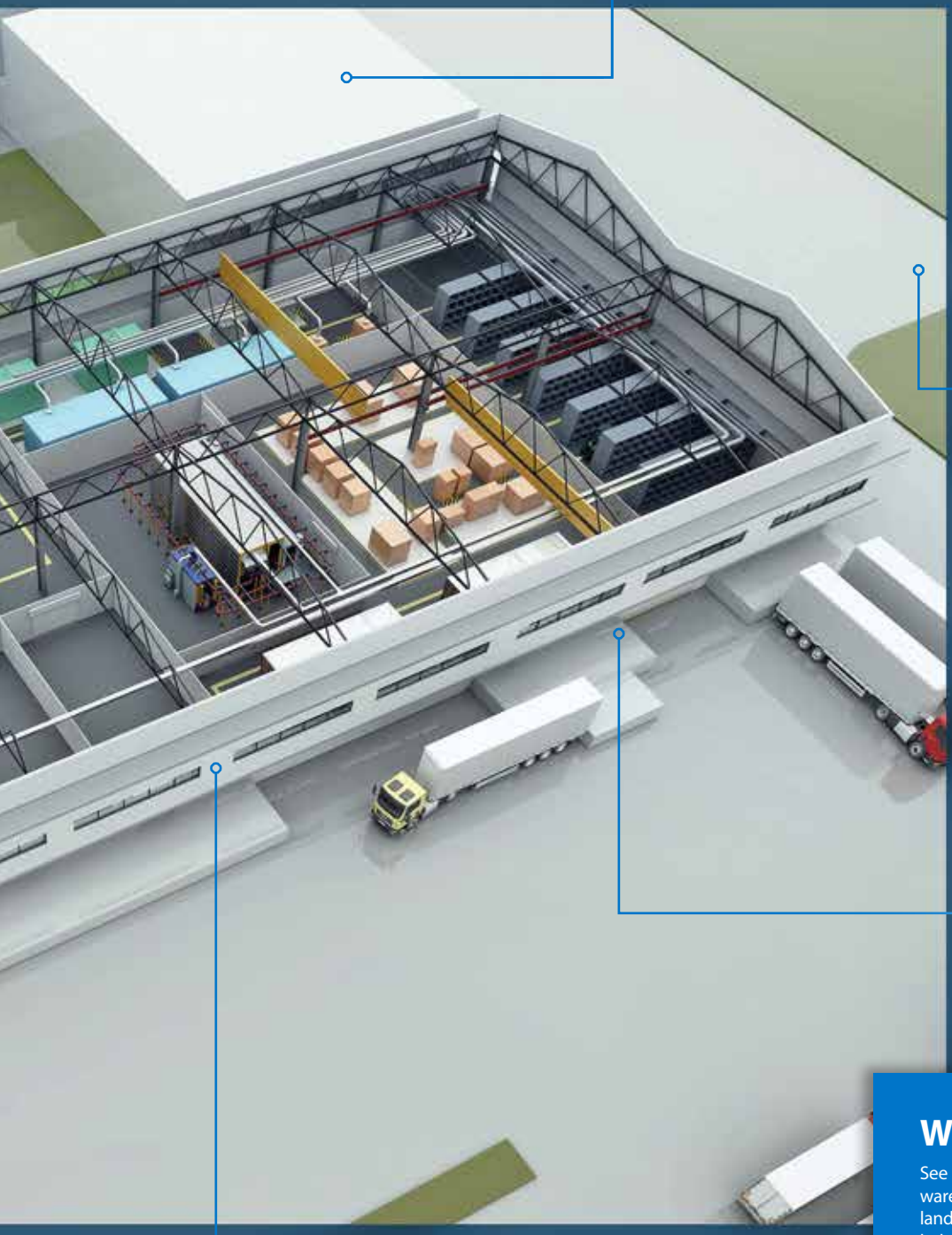
High/Low bays are designed for warehouse environments. Utilize the HML for aisle lighting and reduce fixture count.

Shop Lighting

Durable general ambient lighting, perfect for work stations and utility spaces.

Enclosed Vaportites

Dust , water, and vapor are no match for the VT3. Light your woodworking area, machine shop, shower room, and more with our vapor tight products.



Parking

Choose our OAL2 Site Lighting family of products for parking lots. We also carry a variety of luminaires for covered parking areas.

Dock Light

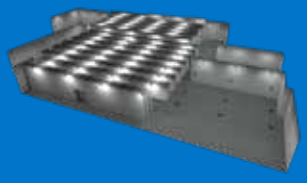
Add light right where you need it for loading and unloading shipments.

Outdoor

Illuminate walkways with OWF or add lighting to the surrounding landscape with our large selection of outdoor lights.

Warehouse Site Lighting

See how NICOR can assist with completing your warehouse layout. From interiors to exteriors and landscape lighting, we'll exceed your standards. To help finalize the best light and quantities for your project, give us a **call at 505-343-5390** and we can run a layout to determine the number of lights you need.



For more information see page 23

Warehouse Starter Kit

Complete Your Project With NICOR

NICOR's wide variety of lighting solutions makes it easy to complete your project from top to bottom. From high-performance industrial high bays to rugged and durable outdoor fixtures, NICOR carries everything you need to outfit your project. When you choose NICOR, you choose a single source to meet all your lighting needs.

HML **HBG** **HBL** **HBC**

Benefits

24Hrs

99% of Orders Ship within 24 Hours

Let us do the heavy lifting. If your project involves a complex floor plan, NICOR's engineers can create a detailed model of your space.

Warehouse locations nationwide. Our experienced team of engineers and sales representatives deliver the highest level of customer support.

Customize Your Kit

Exits & Emergency


EML6

EXL5

EXL4

ECL2

ECL5

Exterior & Landscape


OWG


OWF


OSA


OBH


OFL

Site/Parking


OAL


OGS

Utility Lighting


UDL

Interior Office


TAC


TGL


CDA


CLR


LSA


LSE


LSQ

Interior Shop


WPC


LSC


LS1

Enclosed Vaportites


VT2


VT3

NICOR | select

Adjusts to your life

Make lighting easy with the flip of a switch. Simplify your installations using fixtures that can be adjusted on the fly. Depending on the product, NICOR select fixtures, indicated by an icon, are available with CCT or wattage options.

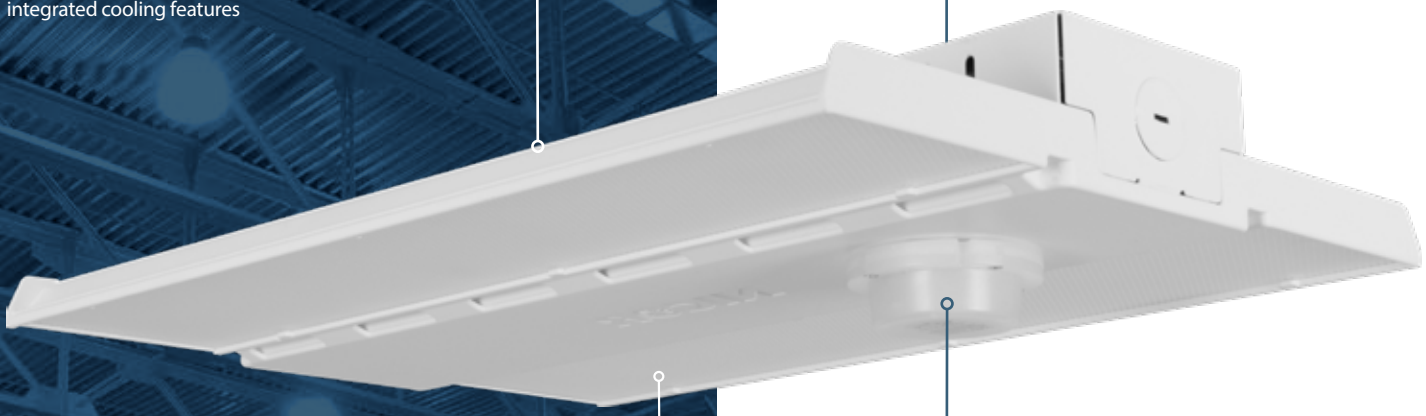
HML

Cast Aluminum Housing

Allows operation up to 55°C with integrated cooling features

10x14" Footprint

Compact design offers impressive light output with simple, single-person installation.

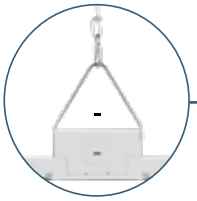


Integrated Sensor Socket

Optional socket allows use of low-voltage sensors.

Lens Options

Diffused lens reduces glare. Wide and Aisle options are designed to reduce fixture count.



Hassle-Free Mounting

Easy mounting with chain and hook or optional surface and pendant mount kits.

HML LED HIGH-PERFORMANCE HIGH BAY

Introducing the newest high bay product line: the patent pending, ultra-efficient, high-performance HML high bay. With only a 10x14" footprint (on lower wattages), its compact design offers an impressive light output with simple, single-person installation. The DLC 5.1 Premium certified fixture offers a variety of wattage, sensor, and aisle distribution options. Its durable single-piece cast aluminum design is perfect for rugged applications like warehouses, gymnasiums, and other industrial or commercial spaces.

Performance Data Standard + Wide

Model #	Lumens	Watts	LPW
HML1100U40A	14200	101	141
HML1100U50A	14284		141
HML1130U40A	18138	129	141
HML1130U50A	18228		141
HML1150U40A	20574	147	140
HML1150U50A	20675		141
HML1210U40A	29258	209	140
HML1210U50A	29412		141
HML1300U40A	42055	305	137
HML1300U50A	42266		138
HML1450U40A	66516	459	144
HML1450U50A	66850		145

Performance Data Aisle

Model #	Lumens	Watts	LPW
HML1150U40C	19134	147	130
HML1150U50C	19228		131
HML1210U40C	27204	209	130
HML1210U50C	27338		131
HML1300U40C	39251	305	131
HML1300U50C	39307		131
HML1450U40C	61860	459	134
HML1450U50C	62171		135

CERTIFIED · DLC LISTED PREMIUM* · DAMP LOCATION RATED · 5 YEAR WARRANTY

*Only 90° x 90° distribution will meet DLC Premium.

Applications: Warehouses, gymnasiums, and other industrial or commercial spaces

Photometric Data

100W 5000K

Input Voltage (VAC)	120-277	277-480
System Level Power (W)	101	98
Delivered Lumens (Lm)	14284	13858
System Efficacy (Lm/W)	141	141
Correlated Color Temp (K)	5000	
Color Rendering Index (CRI)	85	
Beam Angle (0)	88.7	
Beam Angle (90)	90.5	
Spacing Criteria (0)	1.28	
Spacing Criteria (90)	1.26	

130W 3500K

Input Voltage (VAC)	120-277	277-480
System Level Power (W)	129	125
Delivered Lumens (Lm)	18228	17573
System Efficacy (Lm/W)	141.3	140.6
Correlated Color Temp (K)	3560	
Color Rendering Index (CRI)	86	
Beam Angle (0)	89	
Beam Angle (90)	90.6	
Spacing Criteria (0)	1.26	
Spacing Criteria (90)	1.26	

150W 3500K

Input Voltage (VAC)	120-277	277-480
System Level Power (W)	147	147
Delivered Lumens (Lm)	20675	20664
System Efficacy (Lm/W)	140.6	140.6
Correlated Color Temp (K)	3532	
Color Rendering Index (CRI)	86	
Beam Angle (0)	88.9	
Beam Angle (90)	90.6	
Spacing Criteria (0)	1.26	
Spacing Criteria (90)	1.26	

210W 5000K

Input Voltage (VAC)	120-277	277-480
System Level Power (W)	209	
Delivered Lumens (Lm)	29412	29396
System Efficacy (Lm/W)	139	139
Correlated Color Temp (K)	5000	
Color Rendering Index (CRI)	86	
Beam Angle (0)	88.9	
Beam Angle (90)	90.6	
Spacing Criteria (0)	1.28	
Spacing Criteria (90)	1.26	

300W 5000K

Input Voltage (VAC)	120-277	277-480
System Level Power (W)	305	
Delivered Lumens (Lm)	42266	42243
System Efficacy (Lm/W)	139	139
Correlated Color Temp (K)	5000	
Color Rendering Index (CRI)	86	
Beam Angle (0)	88.9	
Beam Angle (90)	90.6	
Spacing Criteria (0)	1.28	
Spacing Criteria (90)	1.26	

450W 5000K

Input Voltage (VAC)	120-277	277-480
System Level Power (W)	459	
Delivered Lumens (Lm)	66850	66783
System Efficacy (Lm/W)	145	145
Correlated Color Temp (K)	5000	
Color Rendering Index (CRI)	86	
Beam Angle (0)	88.9	
Beam Angle (90)	90.6	
Spacing Criteria (0)	1.28	
Spacing Criteria (90)	1.26	

Ordering Information

Example: HML1100U40AS

Series	Version	Wattage	Input Voltage	CCT	Distribution	Sensor Socket	Emergency	Wiring Options
HML	**1**	**100** (14000 lm)	**U** (120-277V)	**40** (4000K)	**A** (90°x90°)	**Blank** (No)	**Blank** (No)	**Blank** (No)
		130 (18000 lm)	**H** (277-480V)[1]	**50** (5000K)	**B** (110°x110°)	**S** (Socket)	**E08** (8W)	**C** (Cord-3-wire, 6ft)[3]
		150 (20000 lm)			**C** (45°x110°)[2]		**E18** (18W)	**C4** (Cord-4-wire, 6ft)[3,4]
		210 (29000 lm)					**E25** (25W)	**F** (Flex Conduit - 6ft)
		300 (42000 lm)					**E40** (40W)	
		450 (66000 lm)						

Specifications and dimensions subject to change without notice. 1) HV available on 150W, 300W, 450W at 5000K only. Consult manufacturer for other models . 2) Aisle distribution is only available for 150W and up. 3) C3 cord is 18/3 wire, 6' long, black. Other lengths available upon request. 3) C4 cord is 18/4 wire, 6' long, black, for use with emergency-enabled fixtures. 4) Flexible metal conduit is 6' long, 18/3 wire configuration. Other lengths available upon request.

Accessories


Microwave Sensor


PIR Sensor


Wireguard


Pendant Kit


Surface Kit


EM Kit


H12V-REMOTE


Aircraft Cable

HBC

Flat Optic Lens

Standard 90° optic to reduce glare

Cast Aluminum Housing

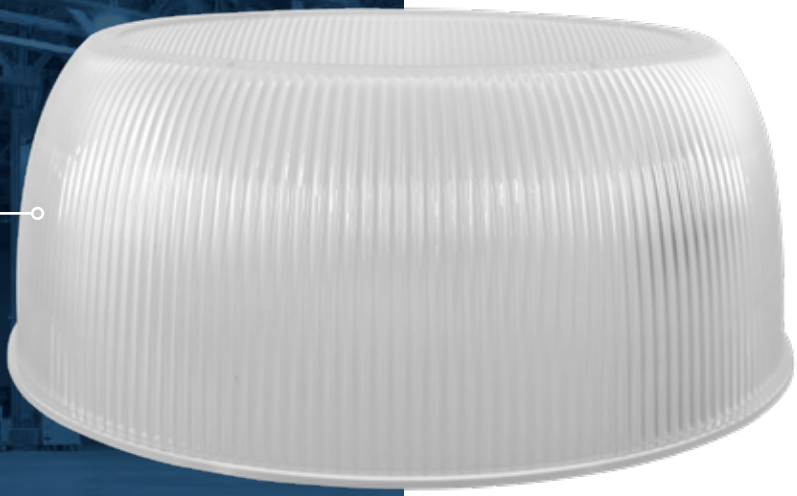
Meets NSF rating and allows operation up to 50°C. Vented aluminum heatsink provides superior cooling while reducing fixture weight

Hassle-Free Mounting

Mounting hook with locking bolt included for rapid installation

Driver & LEDs

Providing long-lasting, efficient performance with uniform color and smooth distribution



Reflectors

Shown with a frosted reflector that reduces glare and creates a 90° beam angle

Beautifully Redesigned with Improved Efficiency

The HBC LED Circular Low Bay/High Bay is a high-performance fixture that produces an output greater than 135 lumens per watt, includes an integrated socket for a field install motion sensor, 90-degree optic, and excellent color rendering at >80CRI. The die-cast aluminum heatsink design allows for a lightweight unit and with the multiple mounting options and accessories, the fixture can address a variety of applications. With consistent light distribution, this fixture is perfect for environments such as grocery stores, gymnasiums, big-box retail, and warehouse spaces.

Performance Data

Model #	Lumens	Watts	LPW
HBC4100U408	14945	102	147
HBC4100U508	15157		149
HBC4150U408	21549	152	142
HBC4150U508	21851		144
HBC4200U408	27998	199.9	140
HBC4200U508	28396		142
HBC4240U408	34446	241	143
HBC4240U508	34935		145
HBC4300U408	40557	297	137
HBC4300U508	41133		139
HBC4400U408	53747	392	137
HBC4400U508	54510		139

Fixture tested per LM-79-08. Photometric data is the performance of a representative fixture. Results may vary in the field.

Applications: Hangers, warehousing, and storage facilities

Photometric Data

100W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	102
Delivered Lumens (Lm)	15157
System Efficacy (Lm/W)	148.6
Correlated Color Temp (K)	5072
Color Rendering Index (CRI)	82
Beam Angle	88.8
Spacing Criteria	1.34

150W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	151.7
Delivered Lumens (Lm)	21851
System Efficacy (Lm/W)	144
Correlated Color Temp (K)	5078
Color Rendering Index (CRI)	84
Beam Angle	88.3
Spacing Criteria	1.39

200W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	199.9
Delivered Lumens (Lm)	28396
System Efficacy (Lm/W)	142.1
Correlated Color Temp (K)	4995
Color Rendering Index (CRI)	84
Beam Angle	88.8
Spacing Criteria	1.28

240W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	241.4
Delivered Lumens (Lm)	34935
System Efficacy (Lm/W)	144.7
Correlated Color Temp (K)	5091
Color Rendering Index (CRI)	84
Beam Angle	87.5
Spacing Criteria	1.28

300W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	296.7
Delivered Lumens (Lm)	41133
System Efficacy (Lm/W)	138.6
Correlated Color Temp (K)	5026
Color Rendering Index (CRI)	84
Beam Angle	85.3
Spacing Criteria	1.41

400W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	392.3
Delivered Lumens (Lm)	54510
System Efficacy (Lm/W)	138.9
Correlated Color Temp (K)	5104
Color Rendering Index (CRI)	82
Beam Angle	81.1
Spacing Criteria	1.38

Ordering Information

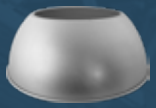
Example: HBC4240U408BK

Series	Version	Wattage	Voltage	CCT's	CRI	Finish
HBC	**4**	**100** (102W - 15000 lm)	**U** (120-277VAC)	**40** (4000K)	**8** (80+)	**BK** (Black)
		150 (150W - 21500 lm)	**H** (347-480VAC)[1]	**50** (5000K)		**WH** (White)
		200 (200W - 28000 lm)				
		240 (241W - 34500 lm)				
		300 (297W - 40500 lm)				
		400 (392W - 53700 lm)				

Specifications and dimensions subject to change without notice. 1) Consult manufacturer for availability.

Accessories

Wire Guard



90° Aluminum Reflector

90° Polycarbonate

Glare Shield

Pendant Mount Adapter

EMB400

HBC4REMOTE

U-Bracket

PIR Sensor

Microwave Motion Sensor

HBL

Wireway Compartment

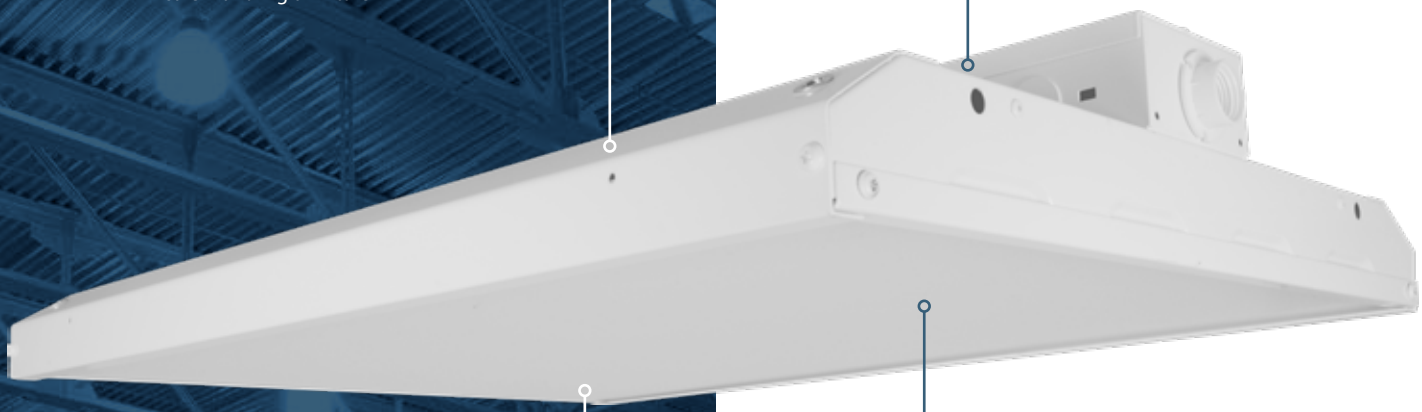
Easy access to wiring makes installation hassle-free

Surge Protection

Built-in 10kA surge protection standard, 20kA for high-voltage

Rounded Edges

Smooth rounded edges provide safer handling of fixture



Lens Options

Standard diffused lens to control glare

High Efficacy LEDs

Provide long-lasting, efficient performance with uniform color and light distribution greater than 130 LPW

Hassle-Free Mounting

Easy mounting with chain and hook or optional pendant kit

HBL the NICOR Workhorse

The HBL is the lighting solution for a wide variety of applications and mounting heights. The energy-efficient luminaire offers a long life, even uniformity, and a variety of accessories and options. The economical solution for industrial, commercial, and other high bay applications.

Performance Data				25W Emergency
Model #	Lumens	Watts	LPW	Lumens
HBL4105UNV40K	14780	106.0	139.4	3486
HBL4105UNV50K	14914		140.7	3517
HBL4155UNV40K	21460	154.9	138.5	3463
HBL4155UNV50K	21546		139.1	3477
HBL4210UNV40K	27302	205.2	133.1	3326
HBL4210UNV50K	27550		134.3	3356
HBL4300UNV40K	41178	304.8	135.1	3377
HBL4300UNV50K	41933		137.6	3439

Applications: Warehouses, gymnasiums, garages, storage areas, commercial and manufacturing facilities, and stack aisles

Photometric Data

105W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	106.0
Delivered Lumens (Lm)	14914
System Efficacy (Lm/W)	140.7
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	80
Beam Angle (0)	104.0
Beam Angle (90)	104.9
Spacing Criteria (0)	1.26
Spacing Criteria (90)	1.26

155W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	154.9
Delivered Lumens (Lm)	21546
System Efficacy (Lm/W)	139.1
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	80
Beam Angle (0)	103.4
Beam Angle (90)	104.5
Spacing Criteria (0)	1.26
Spacing Criteria (90)	1.26

210W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	205.2
Delivered Lumens (Lm)	27550
System Efficacy (Lm/W)	134.3
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	80
Beam Angle (0)	102.4
Beam Angle (90)	102.9
Spacing Criteria (0)	1.24
Spacing Criteria (90)	1.24

300W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	304.8
Delivered Lumens (Lm)	41933
System Efficacy (Lm/W)	137.6
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	80
Beam Angle (0)	102.3
Beam Angle (90)	102.3
Spacing Criteria (0)	1.26
Spacing Criteria (90)	1.24

15,000Lm

27,500Lm

42,000Lm

Ordering Information

Example: HBL4105UV4KEC

Series	Version	Wattage	Input Voltage	12V Output	CCT's	Emergency	Wiring Option
HBL	**4**	**105** (14700 lm)	**U** (120-277V)	**V** (12VDC Output)	**4K** (4000K)	__ (None)	__ (None)
		155 (21500 lm)	**H** (347-480V)		**5K** (5000K)	**E** (EMB250)	**C** (3-Wire Cord)[1]
		210 (27300 lm)					**C4** (4-Wire Cord)[1]
		300 (41000 lm)					**F** (Flexible Metal Conduit)[2]

Specifications and dimensions subject to change without notice. 1) Cord is 18/3 wire, 6' long, black. Other lengths available upon request 2) Flexible metal conduit is 6' long, 18/3 wire configuration. Other lengths available upon request

Accessories

Wireguard

Pendant Mount Kit

Elbow Adapter

PIR Sensor

Microwave Motion Sensor

H12V-REMOTE

EMB250

HBG

Aisle Optics

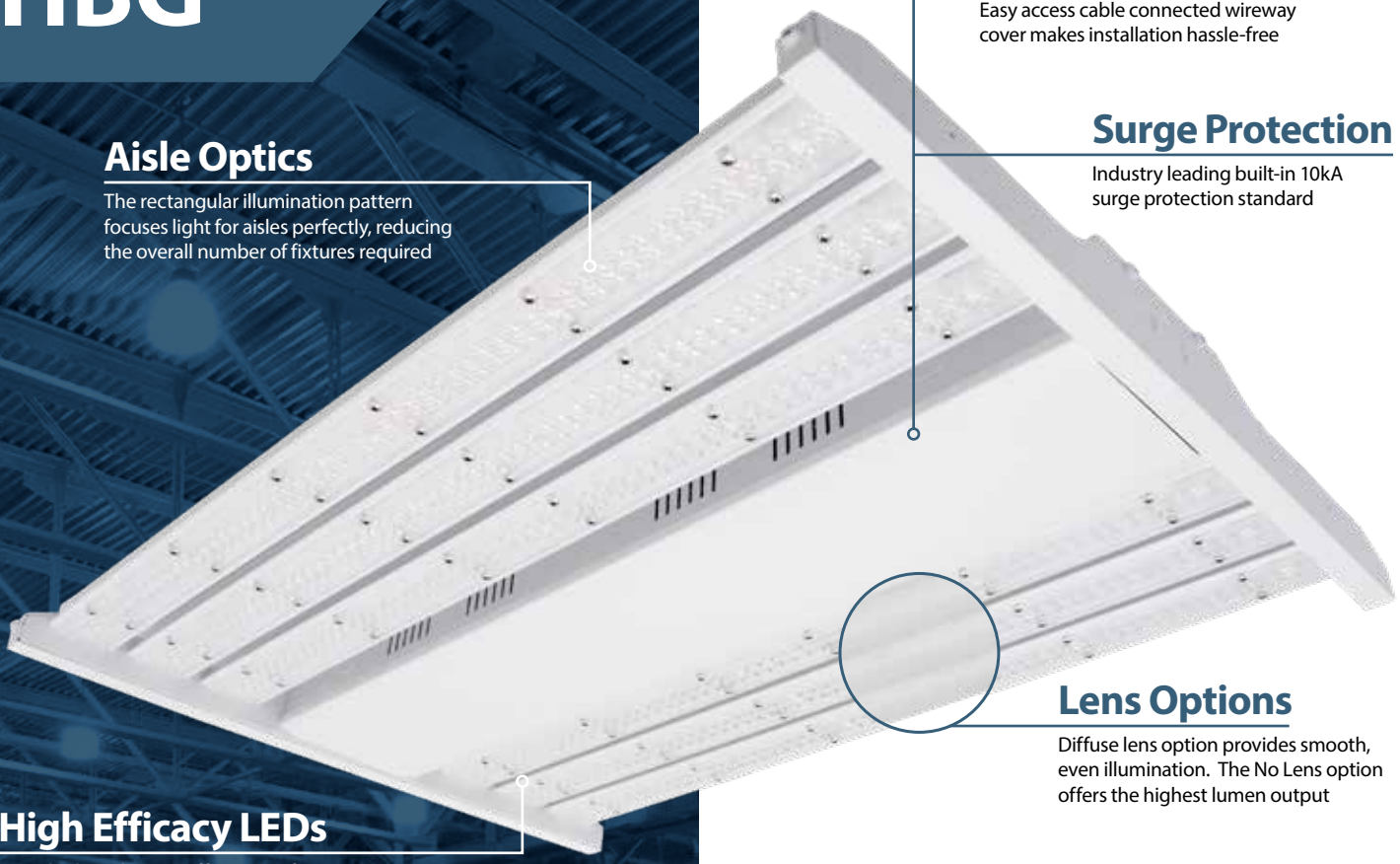
The rectangular illumination pattern focuses light for aisles perfectly, reducing the overall number of fixtures required

Wireway Compartment

Easy access cable connected wireway cover makes installation hassle-free

Surge Protection

Industry leading built-in 10kA surge protection standard



Lens Options

Diffuse lens option provides smooth, even illumination. The No Lens option offers the highest lumen output

High Efficacy LEDs

Provides long-lasting, efficient performance; L88 at 60,000 hours, L70>160,000 hours

180 LPW

Fewer Fixtures

With up to 180LPW fewer fixtures are needed

HBG Spec-Grade High Bay

The HBG provides spec-grade optimization with precision-engineered optics, multiple distributions, and a choice of lumen outputs. Up to 180 LPW and aisle distribution to reduce the number of fixtures required; saving labor and cost of luminaires.

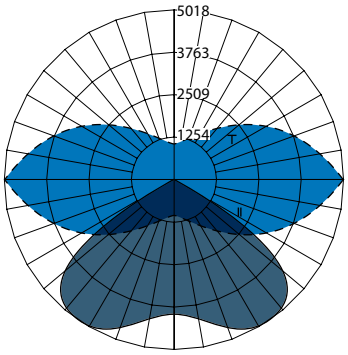
Performance Data 80CRI				70 CRI	
Model #	Lumens	Watts	LPW	Lumens	LPW
HBG116U40#A	16325	101.6	160.7	16771	165.1
HBG116U40#D	15684		154.4	16090	158.4
HBG116U40#N	17378		171.0	17954	176.7
HBG116U50#A	16371		161.1	16818	165.5
HBG116U50#D	15794		155.5	16203	159.5
HBG116U50#N	17515		172.4	18095	178.1
HBG123U40#A	23266	145.3	160.1	23918	164.6
HBG123U40#D	22499		154.8	23315	160.5
HBG123U40#N	24654		169.7	25797	177.5
HBG123U50#A	23326		160.4	24073	165.7
HBG123U50#D	22663		156.0	23485	161.6
HBG123U50#N	24813		170.8	25963	178.7
HBG133U40#A	32854	204.4	160.7	33727	165.0
HBG133U40#D	32231		157.7	32731	160.1
HBG133U40#N	35268		172.5	35970	176.0
HBG133U50#A	33219		162.5	34102	166.8
HBG133U50#D	32396		158.5	32899	161.0
HBG133U50#N	35446		173.4	36152	176.9

Applications: Aisle racking, manufacturing, and gymnasiums

Photometric Data

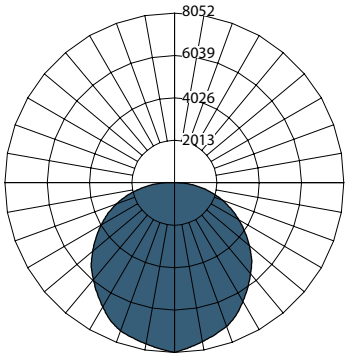
HBG123U508A

Input Voltage (VAC)	120-277
System Level Power (W)	145
Delivered Lumens (Lm)	23417
System Efficacy (Lm/W)	161.2
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	80
Total Harmonic Distortion	<20%
Power Factor	>0.9
Beam Angle (II)	116°
Beam Angle (T)	49°
Spacing Criteria (II)	0.62
Spacing Criteria (T)	1.88



HBG123U508D

Input Voltage (VAC)	120-277
System Level Power (W)	145
Delivered Lumens (Lm)	22663
System Efficacy (Lm/W)	156
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	80
Total Harmonic Distortion	<20%
Power Factor	>0.9
Beam Angle (II)	102°
Beam Angle (T)	117°
Spacing Criteria (II)	1.20
Spacing Criteria (T)	1.26



16,000Lm

23,000Lm

33,000Lm

16,000Lm with Wireguard and PIR Sensor

Ordering Information

Example: HBG116U407APE27

Series	Lumens	Voltage	CCT's	CRI	Lens	Sensor	Emergency	Wiring Options	Field Installed Plug Options[7]
HBG1	**16** (16,000 lm, 102W)	**U** (120-277V)	**40** (4000K)	**7** (70+)[1]	**A** (Aisle)	__ (No Sensor)	__ (No EM)	__ (No Cord)	__ (No Plug)
	23 (23,000 lm, 145W)	**H** (347-480V)	**50** (5000K)	**8** (80+)	**D** (Diffuse)[2]	**P** (HB011-PDX)	**E3** (EMB250)[4]	**C6** (6 ft cord)[5]	**1** (515P) 15A 120V Straight Blade
	33 (33,000 lm, 204W)				**N** (No Lens)	**R** (MWOS360R2)		**C10** (10 ft cord)[5]	**2** (L515P) 15A 120V Twist Lock
								F6 (6 ft FMC)[6]	**3** (L615P) 15A 250V Twist Lock
									4 (L715P) 15A 277V Twist Lock
									5 (L720P) 20A 277V Twist Lock
									6 (L2320P) 20A 347V Twist Lock
									7 (L820P) 20A 480V Twist Lock

Specifications and dimensions subject to change without notice. 1) Consult factory. May have extended lead times or MOQ. 2) If field modification is required, diffuse lens will snap over 'A' aisle lens or 'N' no lens options. 3) 'N' (No lens) option is not DLC5.1 qualified. 4) The EMB400 is only available as an accessory providing up to 40W of illumination. The EMB400 hangs above the luminaire and has an integral junction box for wiring. Only available with 120-277V. See EMB400 spec sheet for complete information. 5) Cord is 18/5 wire, 6' or 10' long, black. Other lengths available upon request. 6) Flexible metal conduit is 6' long, 18/5 wire configuration. Other lengths available upon request. 7) Field installed plugs are placed inside the carton for field attachment only. Plug not available with emergency-enabled fixtures.

Accessories

Wireguard

Pendant Mount Kit

PIR Sensor

Microwave Motion Sensor

MWOS-REMOTE

EMB250

Choose your Ideal High/Low Bay

HML

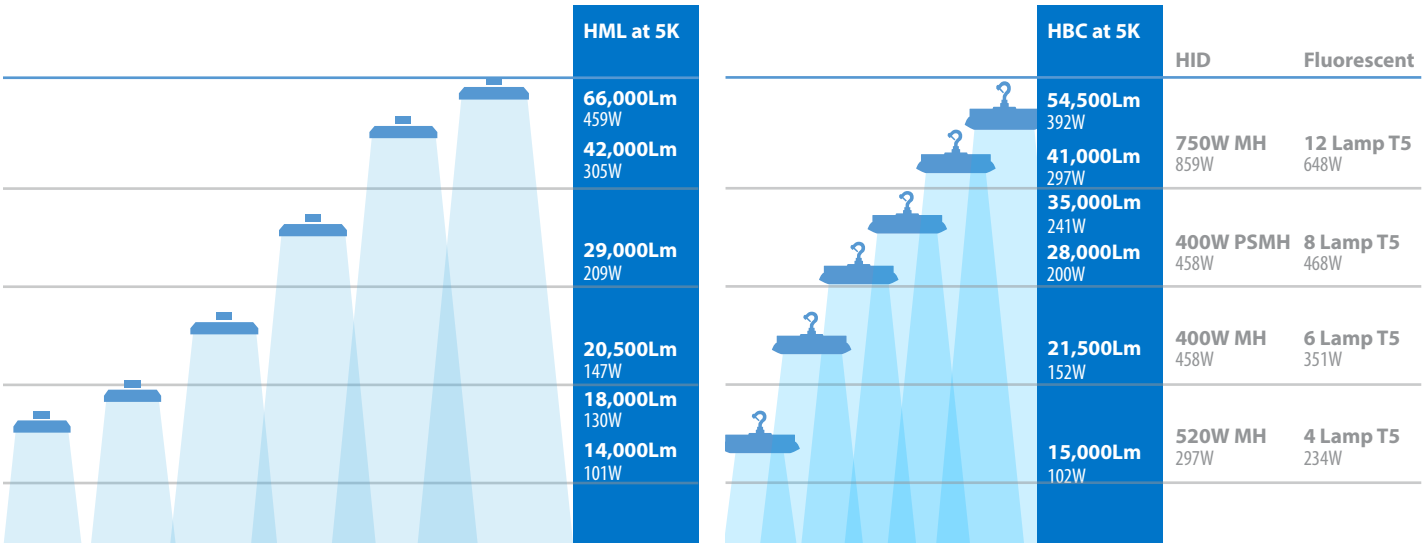
This DLC 5.1 Premium certified LED high-performance high bay offers a variety of wattage, sensor, and aisle distribution options. Its durable single-piece cast aluminum design is perfect for rugged applications like warehouses, gymnasiums, and other industrial or commercial spaces.

HBC

The HBC4 LED Circular Low Bay/High Bay is a high-performance fixture with consistent light distribution. This fixture is perfect for environments such as grocery stores, gymnasiums, big box retail, and warehouse spaces.

Comparison Chart

Lumens	14,000	18,000	20,500	30,000	42,000	66,000	14,900	23,100	28,000	30,300	43,000	53,700
Efficiency	141-147						141-151					
CRI	86						83					
CCT	4000K & 5000K						4000K & 5000K					
Optics	Aisle, Diffuse, or Wide						90° optic					
Sensor Options	H12VSENSORPIR, H12VSENSORMW						HBC4SENSORPIR, HBC4SENSORMW					
Ambient Range	-4°F to 131° (-20°C to 55°C)						-40°F to 122°F (-40°C to 50°C)					
Emergency	HML1EM Series						EMB400					
Ratings												
DLC	5.1 Premium						5.1 Premium					



HBL

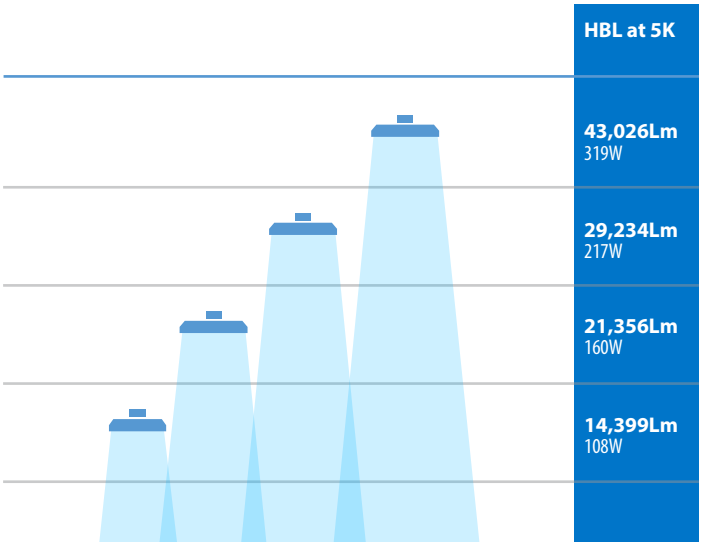
The perfect mid-range option offering an economical choice packaged with high performance. Designed with energy efficiency in mind, it meets DLC premium standards while providing excellent color rendering and even uniformity. Excellent for retrofits when replacing one-for-one older technology luminaires.

14,400	21,400	29,200	43,000
133-135			
84			
4000K & 5000K			
Diffuse			
H12VSENSORPIR, H12VSENSORMW			
-40°F to 113°F (-40°C to 45°C)			
EMB250			
5.1 Premium			

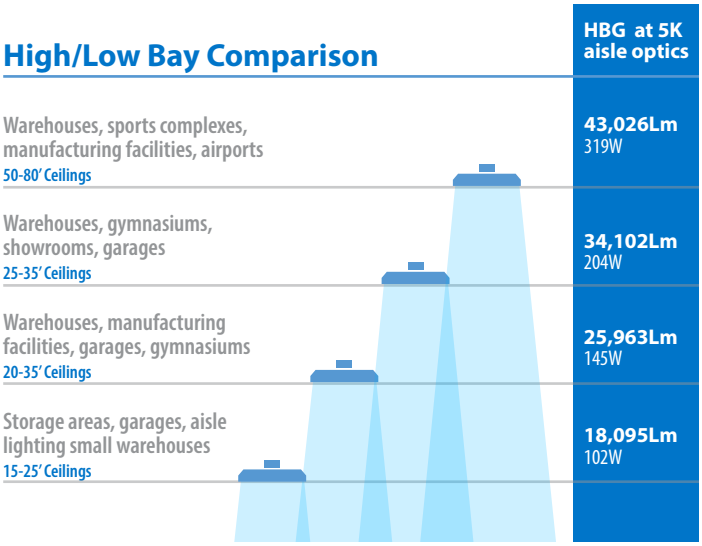
HBG

The HBG provides spec grade optimization paired with maximum efficiency. An excellent choice for new construction installations. Utilize the aisle optic in racking areas for optimal performance in warehouses. Its precision-designed optics and variety of distributions and lumen outputs make it easy to fit in any application.

18,100	26,000	36,200
155-180		
70 or 80		
4000K & 5000K		
Aisle, Diffuse, or No Lens		
HB011-PDX, MWOS360R2		
-4°F to 122°F (-20°C to 50°C)		
EMB250		
5.0 Premium		

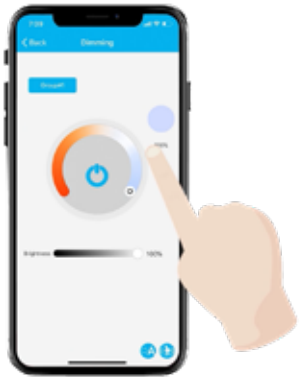


High/Low Bay Comparison



Lighting Controls

Lighting controls can be overwhelming and expensive, but NICOR Network Lighting Controls (NLC) bring a range of affordable and flexible wireless controls to a single room or an entire building. Simply choose your favorite NICOR control-compatible luminaire and controls package.



Three Levels of Lighting Control

Single Luminaire

Room

Building

Why choose NICOR NLC?

Simple
Easy installation – Many NICOR luminaires are controls-ready out of the box
Easy on the budget – value-added and scalable solutions
Easy startup using the NLC App (iOS & Android)

Versatile
Lighting control solutions from stand-alone to full network capabilities
Scale from room control to entire building
Wide selection of control-ready luminaires

Future Ready
Expandable and reconfigurable
Version and firmware updates will be backwards compatible

NICOR NLC Features:

- DLC NLC5 Listed
- Meets or exceeds energy codes for lighting controls
- Flexible grouping/zoning
- Occupancy/vacancy control
- Scheduling
- Daylight responsive control
- Task tuning/high-end trim
- Full dimming
- Energy monitoring
- Networked – Bluetooth Low-Energy Mesh (BLE)
- Building management system integration
- Meets DLC NLC5 Encrypted Security
- Wireless battery wall stations

Emergency Backups

Power failures happen, and you need to be prepared. Our line of emergency drivers provide constant power with a consistent lumen output for 90 minutes. Not sure which driver is right for your project? Reach out to our application engineers to help determine the best solution for your emergency lighting needs.

HML1EM Emergency Battery

- **HML1EM08WRVWH** 8W Battery Pack (120-347V)
- **HML1EM18WRVWH** 18W Battery Pack (120-347V)
- **HML1EM25WRVWH** 25W Battery Pack (120-347V)
- **HML1EM40WRVWH** 40W Battery Pack (120-347V)

EMB400

40W max output on any fixture up to 300W. Easily test your emergency lighting monthly and yearly to meet NFPA 101® without the need of a ladder, using the optional remote control for unbeatable convenience!

EMB250

Outputs 25W (max)

EMB80

Outputs 8.5W (constant)

California's Appliance Efficiency Regulations require all state-regulated small battery charger systems meet the energy efficiency requirements of Title 20 and be marked with a "BC" inside a circle. All NICOR battery packs meet these requirements, ensuring the best possible energy efficiency and performance.

Codes, Compliance, & Controls

Modular Power Supply

NICOR's modular power supply system for lighting control and power distribution provide advantages for contractors and facility managers. The flexible system not only reduces installation time but saves time for maintenance and future renovations for any space. The plug-n-play system quickly snaps together and offers a selection of drop boxes, fixture drops, and cables. Contact NICOR today for more information.

Easily Connect

The modular system makes it easy to connect fixtures to one another and to the power supply.

ASHRAE 90.1 and IECC Codes

In the United States, energy codes are typically based on either ASHRAE 90.1 and the Illuminating Engineering Society (IES) or The International Energy Conservation Code (IECC). These are typical minimum requirements for an energy-efficient design of most buildings. Warehouses were added to these requirements in 2015. The goal is reduced energy consumption by 3.5-quadrillion BTU per year and reduced CO2 emissions by 3% by 2030. The code states that at least 50% of all fixtures must be automatically shut off when unoccupied.

What's Required?

ASHRAE/IES 90.1 2016 requires that warehouse storage lighting be automatically reduced when not in use. Specifically, lighting power must be reduced by at least 50% within 20 minutes of vacancy. IECC 2018 requires that occupancy sensors be used throughout warehouses to conserve energy in open areas and aisles. If the warehouse has windowed areas or skylights, the controls must also include daylighting requirements.

NSF Splash Zone

NSF Zone 2, or Splash Zone rating evaluates lighting for areas where direct contact with food products during normal operations would not be expected. However, equipment in this area may be situated in such a way that during processing or cleaning (or both), liquids may splash, spill or otherwise soil the surfaces of the fixture. Areas include wet or damp process areas, high-pressure purging and/or decontamination used in the process, and areas using hose washdown.

TITLE 24

NICOR luminaires meet Title 24, California's non-residential lighting control requirements when used with additional controls. The controls include occupancy sensing, daylighting, luminaire dimming, and lighting power density.

The Solution

Optimized to meet energy codes for occupancy sensing and daylight harvesting, NICOR has several sensor controls to meet your needs and save energy.

The NICOR passive infrared dimming sensor is easy to set with a remote control for your convenience.

HBL with Microwave Sensor

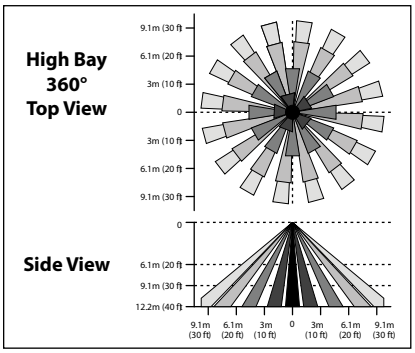
Wireless Options

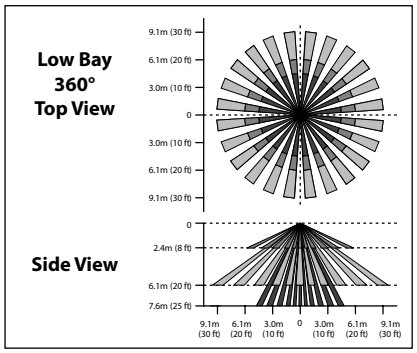
NICOR's Bluetooth Low Energy (BLE) wireless node is available on a variety of luminaires. The technology provides a mesh network where the intelligence of NICOR network lighting controls (NLC) is replicated in each node. From small to large networks, this option is controlled by a simple app. Contact factory for further information and check compatibility with your desired fixture.

Microwave Motion Sensor

See the individual spec sheet for further information.

- Field installed 12VDC sensor
- Microwave motion detector with built-in daylight sensor
- Remote control programmable
- Highly configurable:
  - Detection area
  - Hold time
  - Dimming level
  - Standby period
  - Standby dimming
  - Daylight harvesting threshold
- Max mounting height: 50ft (15m)





Passive Infrared (PIR) Motion Sensor

See the individual spec sheet for further information.

- Field installed 12VDC sensor
- Microwave motion detector with built-in daylight sensor
- Remote control programmable
- Highly configurable:
  - Detection area
  - Hold time
  - Dimming level
  - Standby period
  - Standby dimming
  - Daylight harvesting threshold
- Max mounting height: 40ft (12m)

Sensors can be used with an IMS system to increase energy savings and efficiency.

Take Control of Your Lighting with NICOR's All-In-One System.

NICOR's IMS Lighting Control System introduces simplicity in installation with an easy-to-use UI (User Interface) that anyone can use. The DALI-enabled system provides control on all levels from individual fixture control to multi-site empowerment with our Master Control Unit, or MCU. Developed with energy management in mind, this system is perfect for industrial facilities, data centers, and large commercial buildings. With millions of square feet being installed, you can breathe easy knowing the NICOR IMS is a tried and tested solution for your lighting needs.

- IMS/MCU networking capability
- Full IMS networking structure
- Low voltage IMS enabled luminaires
- Interactive floor plans
- Automated Demand Response (ADR) capable
- Remote access controllability
- Energy consumption and usage
- Fixture health reporting

Site Design Guides

Helpful Hints

- A high bay luminaire is typically mounted at 20′ or higher and low bay is 20′ or lower.
- Most warehouse layouts average about 35 footcandles at the work plane level.
- Arrange your layout to overlap the end of an aisle to avoid shadows.
- Most new construction buildings have 25′–40′ ceilings.
- Recommended reflectance levels are 80/50/20.
- When warehouses include racking system, it is best to specify the HML or HBG high bay with the aisle optics option for these applications.

Warehouse Footcandle Minimums

Task	Horizontal Target (E_h)	Vertical Target (E_v)	Uniformity Target
Loading	10-20	3-6	3:1
Picking/ Classifying	10-20	5-10	3:1
Receiving/ Staging	30-60	10-20	2:1
Packing/ Labeling	30-60	15-30	3:1
Inactive Storage	5-10	2-4	5:1
Inspection	100-200	100-200	3:1
Active Storage (large labels/items)	10-20	5-10	5:1
Active Storage (small labels/items)	30-60	15-30	3:1

Above are the lighting recommendations from the Illuminating Engineering Society. These are minimum levels for each type of task completed in manufacturing facilities. Good lighting is more important than ever.

The effects of great lighting increase workplace productivity

Eye strain, headaches, reduced productivity, and poor concentration are effects of poor lighting conditions, which can decrease productivity. Additionally, the proper color temperature and CRI can increase productivity. An increase as little as 1% in productivity beats any kind of energy savings from antiquated lighting.

Improve Productivity

Application Engineering

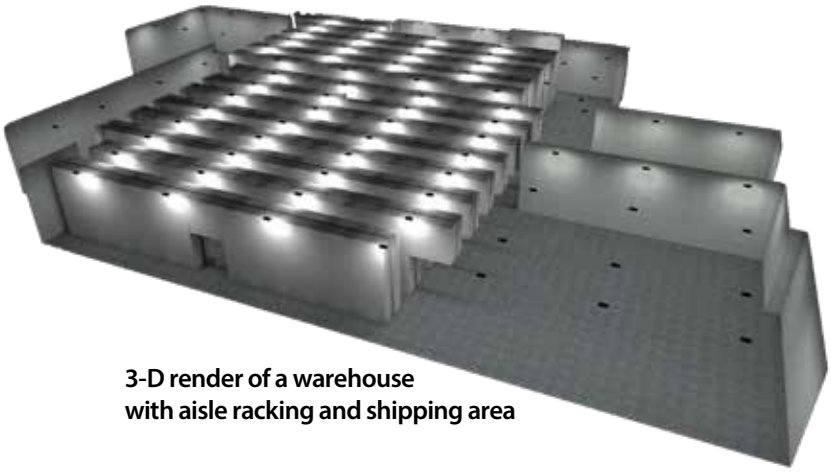
Complex Floor Plan?

If your project involves a complex floor plan or requires a more detailed layout analysis, our team of application engineers can create a detailed 3-D model of your space.

The Making of a Layout

Our application engineers will help you satisfy your customer's requirements; from specific footcandle levels to working space requirements and more. Your customized report provides an in-depth look at how NICOR's lighting solutions are the perfect fit for any project.

- Exporting RCP as CAD files for 3-D modeling
- Revealing hard-to-detect effects of lighting
- Showing uniformity ratios & illuminance levels in specific areas
- Turnaround in 1–2 days



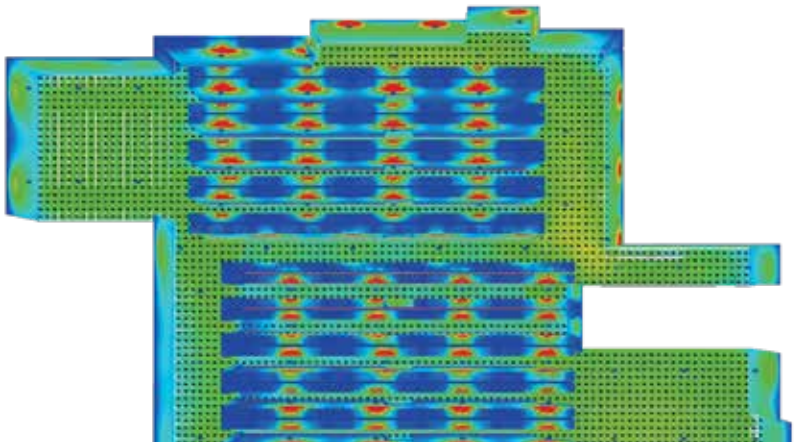
3-D render of a warehouse with aisle racking and shipping area

Email or Call Today

layouts@nicorlighting.com
505-343-5390

Simple Layout?

Visit our website:
https://nicorlighting.com/**lighting-layouts**/



Heat Map

Warehouse Locations

Albuquerque, NM
Atlanta, GA
Buford, GA
Detroit, MI
Folcroft, PA
Houston, TX
Roseville, CA
Syracuse, NY
Van Nuys, CA

T 800.821.6283
F 800.892.8393
www.nicorlighting.com

2200 Midtown Pl. NE
Albuquerque, NM 87107 USA

7 67706 18508 9

LIT-Warehouse-10PK
20220630

NICOR®